

NOTES FOR  
MASOCHISTS

The most notable aspect of the new formulas is how little they've changed. The average players last year were virtually the same as in 1988. The only thing of even remote curiosity that I saw in the three-year scans on page 42 was the slight rises in ratios but not in hits: The new strike zone was actually smaller?

So I really didn't have to change the denominators at all. But since 1987 was shown in exact relation to 1988 by tinkering with decimals, to be consistent, naturally I had to tinker some more.

Maybe I'll just throw the denominators out and work backwards. That usually scares off most people.

**NL & AL pitchers:**

$$W+ = W/3; S+ = S/2.5$$

**NL pitchers:**

$$ERA+ = (3.36 - (392 + ER) / ((1050 + IP) / 9)) / 0.05$$

$$Ratio+ = (11.27 - ((1314 + H + BB) / ((1050 + IP) / 9))) / 0.08$$

**AL pitchers:**

$$ERA+ = (3.76 - (439 + ER) / ((1050 + IP) / 9)) / 0.05$$

$$Ratio+ = (11.92 - ((1391 + H + BB) / ((1050 + IP) / 9))) / 0.08$$

**NL hitters:**

$$HR+ = HR/4.2$$

$$RBI+ = RBI/15.9$$

$$SB+ = SB/5.4$$

$$BA+ = (((1207 + H)/(4700 + AB)) - 0.257)/0.0015$$

**AL hitters:**

$$HR+ = HR/4.5$$

$$RBI+ = RBI/17.4$$

$$SB+ = SB/4.5$$

$$BA+ = (((1294 + H)/(4900 + AB)) - 0.264)/0.0015$$

A denominator is what you divide the statistics in any of the eight categories by to figure out what they were worth to you. By far the easiest one to understand is the wins category.

Year after year in all the Rotisserie leagues, every three wins a team gets will be enough for it to pass one other team: Three wins mean a point in the standings. Therefore, divide the number of wins a player gets to see how many points he gained you in that one category alone.

Saves are consistently 50 percent of wins, year after year. That would seem to mean the denominator should be half the wins denominator, or 1.5; unfortunately, the saves category is almost never that close. Far fewer than 50 percent of the pitchers get the saves, and the tendency is for the category to spread out. So I arbitrarily assign the denominator of 2.5. I'm giving each save only slightly more value than each win, even though a save is considerably harder to find.

About to slip off the three-year-scan screen is the oddity in the American League in 1987. Saves dropped to something like 40 percent of wins. They were an endangered species, and I made the saves denominator two, which explains why Tom Henke shows such a large salary that year.

ERA and ratio are found everywhere, but how do you get a grip on them?

Same method. By how much the pitcher's ERA and ratio help—or hurt—in the standings. You take an average Rotisserie team and subtract an average pitcher; you add a specific pitcher. What's your team's new ERA and ratio? Have you gone up or down?

By the way, the ERAs and ratios in the formulas are the average Rotisserie League figures, which are always somewhat better than the major leagues, for obvious reasons.

League differences only affect the pitchers' two qualitative categories (ERA and ratio); the four denominators are the same for each league. The three cumulative denominators in hitting must be different, while both leagues have the same batting average denominator.

To understand them, think whole numbers, not decimals. Between four and five home runs make a difference in the National League; between five and six steals make a difference. Between 15 and 16 RBIs separate National League teams; in the American League it's more like 17 or 18.

These denominators are getting closer; even Rotisserie batting averages last year were more or less the same. If Gibson, Van Slyke, Strawberry, Hernandez, Daniels, McGee, etcetera, etcetera, hadn't crapped out (with few Milt Thompsons rising in their ruins), it's possible that for the first time the National League would have had a better average hitter than the AL.

I give the decimals in the denominators because I need them to make everything come out just right, and some people do seem to like to play with them. I don't give *all* the decimals I use, because it's sort of embarrassing.

"Just right" is making the average hitter and pitcher earn exactly what they're supposed to earn, \$13.00 and \$8.67. If I don't go to two and even three decimals, I'm going to find the average hitter earning \$13.03 or \$12.98, and that I will not tolerate.

As for who this average hitter is, I really got slack this year and used only five Rotisserie leagues from each major league. The following chart will tell why:

**FIVE NATIONAL LEAGUE ROTISSERIES IN 1989**

	AB	HR	RBI	SB	BA
WASHINGTON GHOST	51108	1175	5892	1345	.257
PRO-BALL	50516	1165	5816	1338	.257
PTL CLUBS	51150	1152	5849	1332	.257
OUT OF THEIR LEAGUE	50695	1151	5816	1326	.257
ALL IN THE FAMILY	50820	1156	5841	1305	.258
Average league	50858	1160	5843	1329	.257
Average team	5086	116	584	133	.257
Average player	363	8.3	41.7	9.5	.257

There's not a dime's worth of difference, is there, between these five leagues? I'm absolutely certain that yours falls within these parameters.

These stats are what 140 hitters bought in various drafts produced, and so here's our average hitter—in decimals, since we're eyeballing him more closely now. (Home runs are getting much closer to stolen bases than the round numbers suggest.)

What do we do with him? Why, we set him on top of the denominators—all the other numbers, too—to find the number of points gained.

	HR+	RBI+	SB+	BA+	pts
WASHINGTON GHOST	279.8	370.1	249.1	0.1	899.0
PRO-BALL	277.4	365.3	247.8	0.3	890.8
PTL CLUBS	274.3	367.4	246.7	0.1	888.5
OUT OF THEIR LEAGUE	274.0	365.3	245.6	-0.1	884.8
ALL IN THE FAMILY	275.2	366.9	241.7	0.5	884.3
Average league	282.9	381.9	225.3	0.0	890.0
Average team	28.3	38.2	22.5	0.0	89.0
Average player	2.0	2.7	1.7	0.0	6.355

Hmmm . . .

Each year when I get to this stage, I hear the pitter-patter of feet. I look up, and everybody's heading for the door.

They don't *like* my standings-gain points. I called them SGP and they hated them. Last year I called them simply points, and still they brought yawns.

I admit there are some unpleasant mental contortions to go through: This guy is claiming the WGN league gained 279.8 points in the home runs category last year—would someone please tell him there are only 55? Heath Research, or any other service that's at all accurate, divvies up 440 points among its NL leagues; he's giving them almost 900.

I reply that I start at zero, on the first day of the season. Heath and the others count from the 10th team in each category, at whatever stage.

I cling to my decimals. Isn't it fascinating that the average player doesn't get as much credit for his steals as his home runs, even though both categories count the same?

Nope.

That while I'm often accused of overrating the Vince Colemans of this world, I actually have a prejudice against them?

No. Confusing, yes; fascinating, uh-uh. Just tell me what Coleman is worth, will you?

Yes, it's a society of materialists, and I'm one, damn straight, so points are being trashed this year.

All credit for the solution goes to Les Leopold, Peter Golenbock's new numbers guru. When I heard what he was going to do—break down the categories by dollars—I snorted, That's easy, I could do that . . . And then I thought, Bingo.

I used to convert only the total points to dollars. A truly easy formula does the job. If the average hitter gains 6.355 points and earns \$13, then—

13 times any hitter's points divided by 6.355 equals his salary; and, for pitchers—

8.67 times any pitcher's points divided by 4.236 equals his salary.

These dinky formulas convert *any* points to dollars, so we apply them to the chart above and get:

#### DOLLAR WORTH OF THE NLR DRAFT STATISTICS

	\$HR	\$RBI	\$SB	\$BA	\$TOT
WASHINGTON GHOST	572	757	510	0	1839
PRO-BALL	567	747	507	1	1822
PTL CLUBS	561	752	505	0	1817
OUT OF THEIR LEAGUE	561	747	502	0	1810
ALL IN THE FAMILY	563	751	494	1	1809
Average league	565	751	504	0	1820
Average team	56	75	50	0	182
Average player	4	5	4	0	13.00

Still maybe not riveting, but we're getting there. Here's the American League hitting picture in condensed form.

	AB	HR	RBI	SB	BA	\$HR	\$RBI	\$SB	\$BA	\$TOT
AVG LG	63146	1502	7682	1334	.264	683	895	606	0	2184
AVG TM	5262	125	640	111	.264	57	74	51	0	182
AVG PL	376	8.9	45.7	7.9	.264	4	5	4	0	13.00

And, even more quickly, the average pitchers.

	IP	W	S	ERA	Rto	\$W	\$S	\$ERA	\$Rto	\$TOT
NL	130	7.8	4.1	3.36	11.27	5	3	0	0	8.67
AL	130	7.8	4.1	3.76	11.92	5	3	0	0	8.67

Until finally even us masochists get to have some fun.

The next chart breaks down the earnings of five different hitters last year. The first three are American Leaguers, the next two Nationals, and the last I'm not saying, but in the end it can only be one person.

\$HR	\$RBI	\$SB	\$BA	\$TOT
5	7	35	1	48
10	12	9	8	38
0	0	0	-2	-1
11	14	3	12	40
23	16	1	5	45
1	6	1	10	19

Answers next year.

No, no—just didn't want to make it too easy to cheat. They are (1) Rickey Henderson, which was meant to be like one of those anxiety-reducers at the start of the SAT tests. I mean, I do hope you got it. (2) Robin Yount. (3) Sam Horn, and if you got that, you're in my college. (4) Will Clark. (5) Kevin Mitchell.

(6) Wade Boggs.

Here's another one. (The second pitcher won more games.)

\$W	\$S	\$ERA	\$Rto	\$TOT
10	0	7	9	25
10	0	-7	-7	-4

(1) Scott Garrelts. (2) Andy Hawkins.

I don't know why, but to see Hawkins losing imaginary money, instead of merely killing you in the standings, has so much more oomph.

Although they're really looking at the very same thing this year in the appendix, I'm pretty sure people are going to be looking at it longer. Great idea, Les.

There's one tiny item on my conscience, before I get to some big items that are on my conscience. Way back in the first chapter I shaved some wins and saves off the teams in the PTL Clubs—so few I doubt many of them spotted it. It was fair, inasmuch as each team lost equally, yet why would I do that?

The only reason I change denominators from year to year is that "amounts"—even in the qualitative categories (BA, ERA, and ratio)—change. The one denominator that should never change is the one for wins, and as long as saves are about half of wins, that denominator shouldn't change either. The three for wins is the rock-solid item that all other denominators are in proportion to.

But wins available in April do change from year to year. Last year in both major leagues, more pitchers than usual stayed the course. The PTL Clubs, if they were cooperating, would have bought 700 wins and 370 saves. But they proceeded to buy 711 wins and 401 saves.

If I didn't have the other years to worry about, I'd let the average pitcher have eight wins and 4.5 saves (rather than 7.8 and 4.1); the average pitcher would gain more points, the points would still be worth \$8.67, salaries wouldn't be inflated.

And I could no longer have my hitters in relation to the previous year, for if the average pitcher's points go up, so must the average hitter's; he's always worth 50 percent more. Once you start changing the hitter's points from year to year, the denominators have to change with them—they can no longer be pegged to some other year.

The visible result would be slight indeed; it might be nothing. But the hitters' denominators should change from year to year because of changes in hitting, not because of some technical difficulties stemming from the bogus idea that the number of wins has changed. So I shave from the pitchers.

I only bring it up because if you do put your league's draft-day pitching totals onto a spreadsheet, and if you do have appreciably more than 700 wins and 370 saves, you're going to get an exaggerated idea of how well your league did in the draft. Scale it to 700 and 370—840 and 444 in the American League—and you'll get the accurate picture.

Notice my buttering up people with spreadsheets? I need help.

Here's one of the leagues I started to audit, and then had to ditch, because it was just giving me too much trouble.

## OUT OF THEIR LEAGUE statistics bought in the draft

PITCHING	IP	W	S	ERA	Rto	EARNED
BAGEL BOYS	1650	104	6	2.99	10.46	98
HOODS	1253	85	43	3.31	11.01	98
ROBBERS	1350	77	34	3.65	11.17	75
BUMS	1390	89	72	3.02	10.83	134
NOTTA LOTS	1098	67	13	3.41	11.53	52
BEER HERES	970	51	62	3.68	11.96	71
PHAROAHS	985	56	44	3.44	11.54	69
GOLIATHS	1087	51	24	3.59	11.87	42
GRAPHICS	1007	53	79	3.14	11.19	106
TOP CATS	1110	67	26	3.74	12.15	48
TOTAL	11899	700	403	3.37	11.30	793

HITTING	AB	HR	RBI	SB	BA	EARNED
BAGEL BOYS	5416	139	661	117	.265	204
HOODS	6290	121	714	120	.258	199
ROBBERS	5068	147	639	153	.250	207
BUMS	4677	102	552	81	.261	156
NOTTA LOTS	4833	136	591	133	.260	195
BEER HERES	5723	107	615	217	.261	214
PHAROAHS	5535	127	587	132	.239	175
GOLIATHS	4799	109	566	144	.260	182
GRAPHICS	3884	61	371	97	.249	109
TOP CATS	4470	102	520	132	.264	171
TOTAL	50695	1151	5816	1326	.257	1810

OVERALL	EARNED	hfs
BAGEL BOYS	302	62.0
HOODS	297	53.0
ROBBERS	282	52.0
BUMS	290	50.0
NOTTA LOTS	247	45.5
BEER HERES	284	41.5
PHAROAHS	244	38.5
GOLIATHS	224	33.5
GRAPHICS	215	33.0
TOP CATS	218	30.5
TOTAL	2603	

You see the amount that each team earned in Patton \$ and then the league total. The hitters earned \$1810, according to the chart. If you add each team up on your calculator, you'll get \$1812.

No sweat. The spreadsheet is adding fractions, the calculator whole numbers, and if enough round up, a change of two is easy to conceive. (That's why the categories in the appendix often appear not to add up.)

However, suppose I don't add the columns to get the league total. Instead I apply the formula to the totals in the various categories—I look at the league as a player. Out of Their League earned \$1811 by that reckoning.

It's closer than the calculator. It's coping with all those decimals, too, so take your pick: either spreadsheet method is more accurate than the clunky old calculator.

Just to be certain, let's do the pitching. Spreadsheet sums the team pitching earnings and gets \$793; calculator sums them and gets \$793. Luck . . . Spreadsheet applies the formula to the league as a whole and gets—\$806.

What the heck's that all about? A two percent discrepancy for an entire league isn't going to alter the salary of any player, but you can rest assured, it drives me crazy. Normally the comparisons are as close as they are with the hitting, but I always check, and when they aren't—I look for someone else's league.

The flaw in the trade analysis (page 175) is about the same size, just a little over two percent.

My hunch is that the trouble occurs in the averages. Lotus occasionally gets fed up with the extended formulas in the qualitative categories. However, I barely know how to use the memory on a calculator, and it would take me until opening day to work out a team's ratio SGP with pencil and paper.

Anyone who takes Out of Their League on as a challenge, thanks in advance. If you write me, I won't be at all offended if you treat me as the village idiot. Actually, I'd prefer it. Sometimes I get letters that I'm simply not qualified to respond to.

The decimals bother me, but to be honest, they're not on my conscience. This is.

Ultimately, a player's value is determined by his exact context. Enough of this blather about the Santa Ana Oxymorons, what did that bozo do for *me* last year? We find this out by taking our own final standings.

The Palukas had Saberhagen in my league last year. Without him on their team, where would they have finished?

	IP	ER	H+BB	W	S	ERA	Rto
PALUKAS	1280	514	1713	83	57	3.62	12.05
SABERHAGEN	262	63	252	23	0	2.16	8.65
-SABERHAGEN	1017	451	1461	60	57	3.99	12.93
POINTS LOST				10	0	8	5

The Palukas drop all the way from second to last in wins. Luckily they still get awarded one point, so they lose 10 points. They drop from second to 10th in ERA and from seventh to last in ratio. Add it up; they drop 23 points. *Twenty-three points.* Amazing.

Now, what about my old points system? For I do sort of miss it. Oh, it's there still—just expressed in dollars—but for the sake of Saberhagen, let's bring back the points. In the format of last year's appendix, under W+ (points he gains in wins) you'd see 7.7; under S+, 0; under ERA+, 6.8; under Ratio+, 8.0. Add it up: 22.5 SGP (standings-gain points).

*Half a point off. Awesome! That is, amazingly lucky.*

The Hackers had Rickey Henderson.

	AB	H	HR	RBI	SB	BA
HACKERS	5864	1517	155	695	156	.259
R.HENDERSON	541	148	12	57	77	.274
-R.HENDERSON	5323	1369	143	638	79	.257
POINTS LOST			3	4	8	1

Not nearly as many points as Saberhagen, but at least he contributes in four categories! Seriously, how does Henderson come out in standings-gain points?

HR+, 2.7; RBI+, 3.3; SB + 17.1; BA +, .6. Add it up: 23.7 SGP.

So clearly, in the exact context of the American Dreams, Saberhagen was more valuable than Rickey. The formula shows Rickey gaining more points, with the result that Patton \$ give the slightly higher earnings to him (\$48 vs. \$45).

What about the exact context of the league, but if the two players were on someone else's team? Getting a *little* hypothetical, but let's see . . .

Take Henderson away from the Nabobs and they lose only 12 points.

Take Saberhagen away from the Nabobs and they lose—*only four points.*

It's rigged, of course, because the Nabobs were already last in ERA and ratio. (Freedom to claim any pitcher you want on waivers is having nothing left to lose.)

If we ran these two players through league after league after league, who do I think would gain more points?

Saberhagen, without question.

Then how come I give Rickey a bigger salary?

Because I like hitters better, that's why. They're where I want to put my money.

Why? Because any hitter helps me in three categories, any pitcher can hurt me in two. That's simplifying it, but I'm confident the people still reading this chapter need no elaboration.

Let's approach this from the other end. Overall, pitching counts as much as hitting, so let's make pitchers worth as much as hitters. (Another questionable assumption, since there are nine pitchers and 14 hitters.) This is what would happen.

The SGP of the average hitter and average pitcher would have to be the same: They are helping the team equally. It's easy to do by simply fiddling with the denominators. Enlarge the hitting denominator to bring the hitter's SGP down. Instead of dividing home runs by 4.5, divide by 5; divide RBIs by 20 instead of 17.4, stolen bases by 5 instead of 4.5. Basically the same profile of the hitter, but now he gains 5.645 SGP rather than 6.356.

Now we have to make the pitcher earn 5.645.

He used to get 4.237. It's not all that hard, conceptually, to say the pitcher gains between five and six points in the standings instead of a little over four; I mean, what the hell.

There are only two denominators to squeeze, though. (No point in changing the average pitcher's ERA and ratio denominators, even if we wanted to, since he's worth zero in those.)

I claim to be wedded to my wins denominator of three, but in fact I have no problem dropping it to two. Again, what the hell. (The wins denominator for Saberhagen, in the exact context of the Palukas, is 2.3—his wins divided by 10.) In the ever-tough center of the wins pack, two is a quite credible denominator.

Now, to make the pitcher worth exactly what the hitter's worth, we'll float the saves denominator. Something has to float. Might as well be those perplexing saves . . . Comes out to a little over two: 2.341 does the trick.

Once more, a perfectly legitimate assertion. The saves category invariably *is* more spread out than wins.

We have the average player's points (he's become unisex, which is another advantage); we know what he's worth (\$11.30); we're ready to run with it. Who shall we do first?

Pitchers, this time, since we're dying to know what the mighty Mr. Saberhagen is *really* worth.

	W+	S+	ERA+	Rto+	SGP	\$
SABERHAGEN	11.5	0.0	6.4	8.2	26.1	52
RUSSELL	3.0	16.2	2.3	2.8	24.3	49
HAWKINS	7.5	0.0	-3.4	-3.3	0.7	1

Over \$50! *Much* more like it. Russell goes up, too, but you don't need a spreadsheet anymore to see that Saberhagen's better. Look at Hawkins . . . *He's* in the black. You feel a little better about taking all that abuse from him, waiting for him to catch a win.

Time for the hitters. Sorry, Rickey, but somebody's got to pay for Bret.

	HR+	RBI+	SB+	BA+	SGP	\$
R.HENDERSON	2.4	2.9	15.4	0.6	21.3	43
SIERRA	5.8	6.0	1.6	3.2	16.6	33
MCGWIRE	6.6	4.8	0.2	-2.0	9.5	19
BOGGS	0.6	2.7	0.4	5.0	8.7	17

Well? So? It's not just Rickey, but okay. Sierra drops \$5; he's still in the 30s. McGwire killed you in batting average. All Boggs has got is batting average. These are good, fair prices.

They may be.

But they're useless.

Name me an auction in this wide country of ours where, this April, \$19 fetches Mark McGwire? \$33 for Sierra? \$43 for Rickey? You're living on another planet. I topped Boggs last year at \$28, and have no complaints.

The reality test does not make Patton \$ run for cover.

The theoretical explanation, in fact, is right in front of us, smack-dab in the points.

	W+	S+	ERA+	RTO+	SGP	\$
AVG AL PITCHER	3.9	1.8	0.0	0.0	5.645	11.30
	HR+	RBI+	SB+	BA+	SGP	\$
AVG AL HITTER	1.8	2.3	1.6	0.0	5.645	11.30

With the assumption that the pitcher is worth as much as the hitter, the single category that becomes hugely favored—far and away the teacher's pet—is the wins category. The weight of 3.9 is almost twice the weight of the next category, RBIs. Does anybody believe that?

We multiply the average player out (108 × pitcher, 168 × hitter) to determine the points for leagues as a whole, convert these points to dollars, and supposedly this is how we are spending our money:

### AVERAGE AL ROTISSERIE LEAGUE

	\$W	\$S	\$ERA	\$RTO	\$TOT
PITCHERS	841	380	0	0	1221
	\$HR	\$RBI	\$SB	\$BA	\$TOT
HITTERS	599	768	531	0	1898

\$841 for wins as against \$599 for homers?

*No one* believes that.

Of the eight categories we worry about, in reality, wins might be at the bottom of the list. Precisely because they're not concentrated in any one player, you don't know where to spend for them; you get hurt chasing them.

And finally, what about the still-unequal budgets? Pitchers earn \$1560, just like the hitters, don't they? So Saberhagen must be around \$60 and Rickey under \$40, and that's that.

Hawkins probably earned \$5 last year.

But then I go back to the exact context of my league, my team. Without Hawkins, I lose seven places in wins. Good grief, another very squeaky wins denominator. But without him I'd *gain* five places in ERA . . . gain four places in ratio. That son of a gun cost me two points. For that I don't pay \$1.